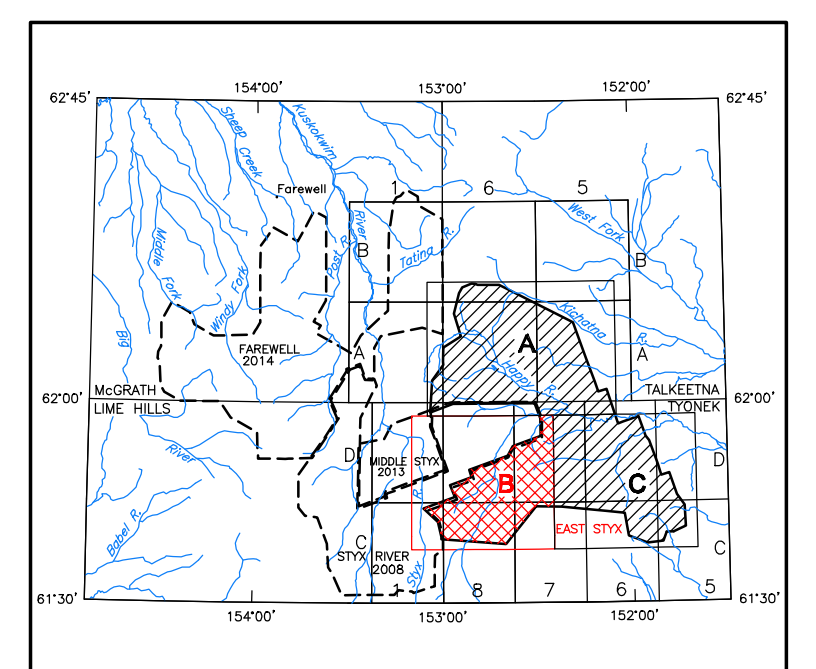
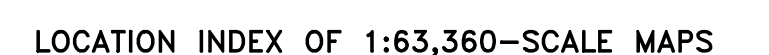


The geophysical data were acquired with a GHEMIVY Electromagnetic (EM) system, a CGS D1344 cesium magnetometer with a Sinterex CS3 cesium sensor, and a Radiation Solutions RS-500 gamma-ray spectrometer. The EM and magnetic sensors were flown at a height of 100 feet. The gamma-ray spectrometer was flown at a height of 150 feet. The data were downloaded from the aircraft to ground and laser altimeters, GPS navigation system, 50/60 Hz monitors and video camera. Flights were performed with an AS-350-B3 Squirrel helicopter at a mean terrain clearance of 200 feet along the E-S line. The survey flight lines, with spacing of 100 feet, were oriented parallel to the line and perpendicular to the flight lines at intervals of approximately 3 miles.

A Novatel OEM5-G2L Global Positioning System was used for navigation. The helicopter position was derived every 0.5 seconds using post-flight differential positioning to a relative accuracy of better than 5 m. Flight path positions were projected onto the Clarke 1866 (UTM zone 5) spheroid, 1927 North American datum using a central meridian (CM) of 153°, a north constant of 0 and an east constant of 500,000. Positional accuracy of the presented data is better than 10 m with respect to the UTM grid.

PARTS OF THE TALKEETNA, TYONEK, McGRATH AND LIME HILLS QUADRANGLES

by
Laurel E. Burns, CGG, and Fugro GeoServices, Inc.
2014



This map has been compiled and drawn under contract between the State of Alaska Department of Natural Resources, Division of Geological & Geophysical Surveys (DGGS), and Fugro GeoServices, Inc. Airborne geophysical data for the area were acquired and processed by Fugro GeoServices in 2011 and 2012. Previously fielded DGGS surveys adjacent to the current survey are shown in the location map by dashed lines, survey name, and date of publication. The project was funded by the Alaska State Legislature as part of the Alaska Division of Geological and Geophysical Mineral Inventory Program.

All data and maps produced to date from this survey are available in digital format on DVD for a nominal fee through DGGS, 3354 College Road, Fairbanks, Alaska, 99709-3707, and are downloadable for free from the DGGS website (www.dggs.alaska.gov/pubs). Maps are also available on paper through the DGGS office, and are viewable online at the website in Adobe Acrobat .PDF file format.